

PTSD AMONG REFUGEES
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1. Introduction. Long known as a syndrome, PTSD is one of our newest and most troublesome diagnoses. Dissociative, paranoid, and somatization symptoms are often as or more prominent than anxiety symptoms, although PTSD is classified as an Anxiety Disorder in DSM-IV. Unlike most psychiatric disorders, it rarely occurs without another Axis 1 disorder. Even more than Panic Disorder, it occurs with a wide range of Mood, Anxiety, Substance and other disorders. Secondary gain can complicate assessment and treatment for veterans, accident victims, and others who might profit from this diagnosis. Some degree of alexithymia (which can also occur in other disorders) is virtually universal. Study of PTSD among refugees may contribute to our understanding of this confusing condition. Likewise, improved understanding of PTSD may facilitate the care and possible prevention of PTSD among refugees.

Samples and Methods. This review arises from four data sources: (1) experience and observations while working as a physician and later as a psychiatrist in Laos and Thailand during war and refugee flight; (2) a decade-long community-based study of 100 Hmong refugees in Minnesota; and (3) study of traumatic experience among 286 refugee psychiatric patients in Minnesota, and (4) review of the literature.

2. Review of Literature on Refugees. Special psychosocial problems occurring among refugees can complicate the diagnosis of PTSD i.e.,

- loss of social role and property,
- loss of social network, including relatives and friends Hauff, 1995 #685;
- cultural change/loss; Lin et al observed "life change units" in relocated Vietnamese refugees that were three times that of their pre-refugee "life change units" Lin, 1984 #681; change was greatest for those who were married, middle-aged or elderly, and on welfare;
- acculturation stress,
- language problems Allodi, #675,
- anger/grief,
- traumatic experience before/during/after flight and relocation,
- socio-political factors forcing refugee flight,
- special psychosocial characteristics of refugees, such as older age Allodi, #675, less education Allodi, #675, ethnicity Mollica, 1990 #676.

Prisoners of war and torture victims have revealed high rates of trauma to the head Goldfeld, 1988 #677; Begovac, 1993 #678, with 67% of 1,458 ex-prisoners reporting head strikes. Among 993 Cambodian refugees, 18% reported having been beaten about the head Mollica, 1993 #679. Other potential sources of brain injury in Mollica et al included malnutrition and dehydration (96%), ill health with lack of medical care (87%), and torture by near-drowning and other methods of asphyxiation and suffocation. Methods of eliciting trauma histories are themselves complex and may vary across cultures Westermeyer, 1989 #674. PTSD has been reported in a high percentage of certain refugee groups Cervantes, 1989 #334, although some of these clinical phenomena could be "ptss" (as described above) rather than PTSD.

Refugee patients may be reluctant to seek medical or psychiatric care for PTSD. This may result from lack of familiarity with mental health services, together with a tradition for seeking such services for only the most severe forms of psychosis or mental disability Ganesan, 1989 #680. In a study of depressed Vietnamese refugees in a primary care clinic, almost all presented with

somatic symptoms Lin, 1985 #683. Soon after arrival, most refugees report high levels of anxiety and depression, with little correlation with most demographic variables Chow, 1989 #684.

Hypervigilance has not been studied in refugee populations. However, paranoid disorders have been reported in migrants and refugees for several decades (ref). Moreover, paranoid symptoms have been noted in many, but not all refugees studied in a community survey (ref). Thus, hypervigilance may be merely a concomitant of refugee status rather than a consequence of traumatic experiences.

Psychic numbing has also not been studied among refugees. However, somatization -- a concomitant of psychic numbing -- has been observed among refugee psychiatric patients (ref). It has also been noted among refugees in community surveys, especially those reporting ill health. Thus, numbing may be a correlate of refugee status, rather than of traumatic experience.

Finally, sleep, memory, and guilt symptoms may all be symptoms of Major Depressive Disorder (MDD) or may accompany depressive symptoms, either in clinical or community samples. Both MDD and depressive symptoms have been observed among refugee patients and refugee community members (ref). However, MDD and depressive symptoms appear to resolve in the first few-to-several years following resettlement (ref). Thus, one would expect little MDD in a refugee population such as that described in the survey below, since they had been in the U.S. for 8 years.

Refugees may encounter traumatic experiences in the country of relocation, which may give rise to PTSD. Allodi Allodi, #675 has studied 33 immigrants to Canada, all of whom had "posttraumatic somatoform disorders" in association with work-related accidents. As compared to a working sample of 36 immigrants, the clinical group were older ($P < .05$), had less education ($P < .001$), and poorer English skills ($P < .05$).

2. Survey in the Community.

Few such studies exist. In our longitudinal study of Hmong refugees in the United States none of the following factors were related to current psychiatric symptoms or psychiatric treatment in the United States: combat exposure, having been wounded, loss of family members during refugee flight, and stressors in the United States.

No studies of Hypervigilance have been conducted among refugees. However, cases of paranoid disorders have long been described among migrants (ref) and refugees (ref). In addition, paranoid symptoms appear to be increased in a significant number, but not all refugees (ref). Thus, hypervigilance could be an ego-syntonic, adaptive mechanism among refugees, rather than a symptom of psychological disintegration.

Numbing has likewise not been studied among refugees. However, somatization of psychosocial distress has long been recognized among refugees, including both refugee psychiatric patients (ref) as well as in surveys of refugees who are not patients (ref). Psychological numbing could be a manifestation of somatization, which often accompanies alexithymia (ref).

Disturbances of memory, sleep, and guilt have also not been studied among refugees. However, these symptoms may accompany depression, which has been well studied among refugees. However, the increased incidence of clinical Major Depressive Disorder appears to trail off after several years following relocation. Since the community subjects studied here had been in the U.S. about 8 years, one would not expect continued depressive symptoms as a result of loss and relocation.

Method: Posttraumatic Stress Symptoms. Internal correlations among the various symptoms within the self-rated PTSS scales were quite high, with each correlation significant at $P < .01$. Each symptom correlated with the overall scale at r-values ranging from .65 to .70. The comparisons among the various symptoms and the overall scale were as follows:

<u>Sx. Scale</u>		<u>Memory</u>	<u>Numbing</u>	<u>Hypervig.</u>	<u>Surv.guilt</u>	<u>All 5 sx.</u>
Sleep	.44**	.40**	.46**	.34**	.78**	
Memory		--	.49**	.34**	.28**	.71**
Numbing		.49**	--	.55**	.70**	
Hypervigilance	.34**	.55**	--	--	.50**	.78**
Survivor guilt	.28**	.29**	.50**	--	.65**	

* $P < .05$ ** $P < .01$ (2 tailed correlation coefficient)

These comparisons indicate that various indices of self-rated PTSS correlated highly with one another. Survivor guilt correlated least strongly with the other symptoms (mean $r = .35$) and hypervigilance correlated most strongly with the other symptoms (mean $r = .47$). The correlations of each symptom complex with the overall scale was quite strong, with a mean r-value of .72.

Internal correlations among the various symptoms within the psychiatrist-rated PTSS scales were strong, but not as uniform as with the self-rated symptoms. One correlations were not statistically significant (i.e., hypervigilance-memor), and two correlations were significant at only $P < .05$ (i.e., hypervigilance-sleep and hypervigilance-survivor guilt). In particular, the "hypervigilance" symptoms were notably less correlated with the other symptoms. Nonetheless, the individual symptoms correlated with the overscale at r-values ranging from .58 to .79. The comparisons among the various symptoms scales and the overall scale revealed r-values as follows:

<u>Sx. Scale</u>		<u>Memory</u>	<u>Numbing</u>	<u>Hypervig.</u>	<u>Surv.guilt</u>	<u>All 5 sx.</u>
Sleep	.47**	.41**	.21*	.52**	.79**	
Memory		--	.43**	.11	.28**	.71**
Numbing		.43**	--	.51**	.77**	
Hypervigilance	.11	.51**	--	--	.26*	.58**
Survivor guilt	.37**	.44**	.26*	--	--	.70**

* $P < .05$ ** $P < .01$ (2 tailed correlation coefficient)

These comparisons indicate that various indices of psychiatrist-rated PTSS correlated highly with one another. Hypervigilance correlated least strongly with the other symptoms (mean $r = .27$), and numbing correlated most strongly with the other symptoms (mean $r = .45$). The correlations of each symptom complex with the overall scale was quite strong, with a mean r-value of .71.

Finally, the self-rated PTSS scales were compared with the psychiatrist-rated PTSS scales. The correlations between the symptoms subscales and the overall scales were as follows:

<u>Symptoms Scale</u>	<u>Correlation of Self vs. Psychiatrist Rating</u>	<u>Probability</u>
Sleep	.62	$P < .01$
Memory	.45	$P < .01$
Numbing	.21	$P < .05$
Hypervigilance	.19	$P = n.s.$
Survivor guilt	.01	$P = n.s.$
Total, all 5 scales	.56	$P < .01$

Method: Sources of Refugee-Related Stress. Three separate stress scales were devised, based on both time and geography. These included the "War in Laos" scale, the "Refugee Flight" scale (beginning when the subject decided to flee from Laos and ending with departure from the Thai refugee camp for the United States), and the "Stress in the United States" scale. Each item was weighted equally. Items for each scale and distribution of scores were as follows:

- War in Laos scale: exposed to military attack or combat, wounded (range 0 to 2; 0 = 5 ss, 1 = 80 ss; 2 = 15 ss);
- Refugee Flight scale: loss of family members, attacked during flight, number of months in Thailand refugee camp, marital change in Thai refugee camp (range 0 to 5; 0 = 5 ss; 1 = 33 ss; 2 = 27 ss; 3 = 21 ss; 4 = 8 ss; 5 = 6 ss);
- Stress in the United States: separation from family members, deaths of family members, loss of jobs, relocations of residence from one community to another, children born in the United States, mental-emotional problem in the U.S. (range 0 to 5; 0 = 13 ss; 1 = 28 ss; 2 = 33 ss; 3 = 14 ss; 4 = 8 ss; 5 = 1 ss; unknown = 3 ss).
- Total stress: sum of the three scales (potential range = 0 to 12; actual range = 2 to 10; 0 = 0 ss; 1 = 0 ss; 2 = 5 ss; 3 = 11 ss; 4 = 27 ss; 5 = 19 ss; 6 = 17 ss; 7 = 10 ss; 8 = 6 ss; 9 = 1 ss; 10 = 1 ss; unknown = 3 ss).

Findings

Correlation Among Various Past Stressors. As shown in Table 1, War/Laos stressors were inversely correlated with Refugee Flight stressors at $P < .05$ ($r = -.20$). Both the Refugee Flight scale and the U.S. Stressors scale were correlated with the Total Stress scale (both at $P < .01$), but the War/Laos substance was not correlated with the Total Stress scale.

Correlation of Previous Stressors and Current Symptoms. The stressor scales were poorly correlated with self-rated PTSS, although the Total Stress scale was correlated with Numbing, Hypervigilance, and the Total Stress scale at $P < .05$. At least one of these correlations would have been expected by chance alone. One stressor scale was correlated with psychiatrist-rated PTSS: the Survivor Guilt scale was correlated with both Refugee Flight (at $P < .05$) and with Total Stress ($P < .01$). The latter correlation would not have been expected by chance alone. With regard to self-rated psychiatric symptoms and PTSS, 44 subscales revealed 8 correlations at .05 and 1 correlation at .01. The distribution suggested that Refugee Flight and Total Stressors were apt to elicit decreased self esteem/demoralization and increased depressive symptoms. Stressor events and psychiatrist ratings were poorly correlated, with one exception: observed depressive symptoms were apt to be correlated with increased Total Stress symptoms.

Correlation of PTSS and Other Indices of Psychosocial Health and Acculturation. As shown in Table 2, both self-rated and psychiatrist-rated PTSS were strongly correlated with two indices of psychosocial function: i.e., DSM-III Axis 5 coping level during the last year and Global Assessment Scale (at $P < .01$ and r -values of .27 to .77). Increased PTSS were correlated with poorer psychosocial function. However, psychosocial stressors in the last year (DSM-III Axis 4) were not correlated with either measure of PTSS. Increased self-rated PTSS was correlated with greater Hmong cultural affiliation in the U.S. at $P < .05$. Greater acculturation to the U.S. was correlated with fewer PTSS at $P < .05$. Increased English literacy was correlated with increased PTSS both on self-assessment (at $P < .05$) and psychiatrist assessment (at $P < .01$). Self-rated psychiatric symptoms on two scales (the SCL-90 and the Zung Depression Scale) were strongly correlated with both self-rated PTSS and psychiatrist-rated PTSS, with 22 comparisons significant at $P < .01$. Predictably, the mean r -values with self-rated PTSS (i.e., .74) were almost twice as high as the mean r -values of the psychiatrist-rated PTSS (i.e., .36). The psychiatrist-rated scales were also highly correlated with both self-rated PTSS and psychiatrist-rated PTSS. The correlations were highest for global symptoms and for depressive symptoms and lower for

irritability-hostility-projection symptoms. Predictably, psychiatrist-rated psychiatric symptoms correlated more highly with psychiatrist-rated PTSS than did self-rated psychiatric symptoms.

4. Patient Study. In order to assess levels of stress among refugee patients, we devised three categories of trauma: (1) deliberate, personal harm to captured, arrested, or imprisoned persons; (2) impersonal threat or injury (e.g., combat, under fire during refugee flight, wounded during such occasions); and (3) all others (e.g., hearing of harm to others, feeling threatened). See Table 3 for data.

Lowland Lao, Cambodian and Vietnamese refugees were more apt to have been victimized in a deliberate face-to-face context, whereas the highland mountaineers were more apt to have been exposed to random combat or flight violence ($p < .005$). Age was directly correlated with more stressful violence, with older subjects having experienced more deliberate face-to-face violence and younger subject having experienced more indirect threat ($P < .005$). Those having undergone deliberate violence were more apt to be widowed, separated or divorced ($P < .005$). PTSD diagnoses were directly correlated with severity of violence ($P < .001$). Current psychosocial coping, as defined by DSM-III Axis 5, was inversely correlated with severity of victimization ($P < .001$).

These refugee patients most often manifested Mood, Anxiety, and Substance Disorders. Alleviation of their associated disorders often relieved the PTSD entirely without special psychotherapy addressing the PTSD. In some cases, PTSD symptoms persisted despite alleviation of the associated disorder, requiring special psychotherapy for PTSD. "Delayed bereavement" therapy was often effective. Despite excellent therapeutic outcomes in certain cases, recurrence of symptoms followed subsequent losses and required retreatment. Although most patients made stable recoveries, treatment was often prolonged. Some patients showed improvement, but with continuation of both PTSD and the associated disorder.

5. Experience and Observations. While still in the dangerous environment, hypervigilance and some startle appear to be commonplace. Numbing is rarely present with initial exposure to life-threatening and horrific situations; on the contrary, transient fear, anxiety, panic and bereavement are typical. However, with repeated exposure to loss, horror, and death, the emotional experience seems to diminish -- but to a variable extent among individuals. Some people take advantage of temporary "safe havens" or "time-out" to process their traumatic experience.

Posttraumatic stress symptoms or "ptss" (symptoms without disability or treatment-seeking) occur often following life-threatening or horrific experiences. "Ptss" may be a universal experience if life-threatening or horrific stress has been sufficiently great and prolonged. Examples of "ptss" include the following: a monthly nightmare; annual "anniversary" insomnia and intrusive thoughts lasting a week or two; and aversion to stimuli that reawaken flight-fright responses (e.g., combat movies, helicopter overhead). "Ptss" can give rise to therapeutic, thought-stimulating grief-work if the individual takes topic to process the traumatic event. At this level, such symptoms are not disabling or associated with an Axis 1 psychiatric disorder.

Typically, refugees and expatriates do not experience either "ptss" or PTSD so long as they remain with the group in which the traumatic events occurred (e.g., village, military unit, work group). Loss of the "trauma-origin" group and entry into a new social unit (e.g., refugee camp in Thailand, relocation to a third country, return to country-of-origin) has precipitated "ptss" often and PTSD infrequently.

More severe PTSD, with disability and onset of a comorbid psychiatric disorder, usually ensued months or years later. Losses often precipitated PTSD: i.e., death of a family member, loss of a

job, family discord, or a new traumatic event in the camp or relocation site (e.g.. robbery, sexual assault, physical assault).

6. Discussion. Publication of specific diagnostic criteria can lead to reification of psychiatric disorder. We still have much to learn regarding the neurotransmitter correlates, pathogenesis, and course of PTSD. Epidemiologists should distinguish "ptss" from PTSD. Like bereavement, ptss may be an orthopsychological condition that can give rise to psychopathology if avoided or inordinately delayed. Horror, violence, life-threat, and tremendous loss have afflicted humankind through history and prehistory. It is likely that we possess the neural, psychological, and sociocultural infrastructure to abide such losses and recover from them. Some of us have a vulnerability (or all of us have some vulnerability) to be disabled by such events and their psychological sequelae. Further understanding should be aimed at finding ways to facilitate the adaptive use of ptss and the timely recognition and care of PTSD.

It appears clear that abuse of incarcerated prisoners and torture appear to be especially pathogenic.

TABLE 1
STRESSORS WITH WAR IN LAOS, DURING FLIGHT, AND IN U.S.
ASSOCIATIONS WITH PSYCHOSOCIAL FUNCTION, n= 97

Variable	War/Laos	Ref. Flight	U.S.	Total Stressors
<u>Correlations among stressors and Total Stressor Score</u>				
War/Laos	--			r=+.10
Refugee Flight	r=-.20*		r=+.68**	
U.S. Stressors	r=-.02	r=-.05	r=+.65**	
<u>PTS Symptoms, Self-rated</u>				
Sleep	r=+.08	r=+.17	r=+.02	r=+.17
Memory		r=-.03	r=+.09	r=+.15
Numbing		r=-.02	r=+.19	r=+.12
Hypervigilance	r=-.14	r=+.18	r=+.17	r=+.23*
Survivor guilt	r=-.08	r=+.05	r=+.13	r=+.11
Total, all 5 scales	r=-.05	r=+.19	r=+.16	r=+.26*
<u>PTS Symptoms, Psychiatrist-rated</u>				
Sleep	r=+.04	r=+.16	r=+.01	r=+.13
Memory		r=+.01	r=+.06	r=+.09
Numbing		r=+.10	r=+.04	r=+.02
Hypervigilance	r=+.11	r=-.06	r=+.10	r=+.06
Survivor guilt	r=-.01	r=+.24*	r=+.19	r=+.31**
Total, all 5 scales	r=+.07	r=+.12	r=+.10	r=+.18
<u>Other Self-rated Scales</u>				
1.90-item Symptom Checklist (SCL-90)				
Genl. Sx. Index	r=-.15	r=+.18	r=+.18	r=+.23*
Somatization	r=-.16	r=+.18	r=+.04	r=+.13
Obsess-Compul.	r=-.15	r=+.08	r=+.23*	r=+.19
Interpers. Sensit.	r=-.11	r=+.21*	r=+.17	r=+.26*
Depression	r=-.11	r=+.25*	r=+.23*	r=+.33**
Anxiety	r=-.13	r=+.15	r=+.09	r=+.15
Hostility	r=-.13	r=+.04	r=+.13	r=+.09
Phobic Anxiety	r=-.20*	r=+.07	r=+.13	r=+.05
Paranoid Ideation	r=-.05	r=+.07	r=+.21*	r=+.19
Psychoticism	r=-.13	r=+.14	r=+.15	r=+.18
2. Zung Depr. Scl.	r=+.05	r=+.22*	r=-.06	r=+.14
<u>Psychiatric Scales, Psychiatrist-Rated</u>				
1. Ham. Anxiety	r=-.01	r=+.13	r=+.08	r=+.15
2. Ham. Depress.	r=+.03	r=+.12	r=+.12	r=+.18
3. BPRS	r=+.05	r=+.11	r=+.05	r=+.14
4. Nurse's Observation Scale Inpatient Evaluation				
Depression	r=+.17	r=+.13	r=+.11	r=+.22*
Irritability	r=+.09	r=-.04	r=+.05	r=+.04

5. Inpatient Multidimensional Psychiatric Scale

Anxious Intropun.	r=-.04	r=+.22*	r=+.19	r=+.29**
Hostile Belliger.	r=+.10	r=-.09	r=+.01	r=-.04
Projection	r=+.05	r=-.04	r=-.07	r=-.07
Total Score	r=+.04	r=+.05	r=+.13	r=+.15

* P < .05 ** P < .01 (2 tailed correlation coefficient)

TABLE 2
POSTTRAUMATIC STRESS SYMPTOMS AND CURRENT VARIABLES, n= 97

<u>Variable</u>	Self-PTSS Scale	Psychiatrist-PTSS Scale
<u>Psychosocial Function</u>		
Axis 4 (Psy-soc stressors)	$r=+.05$	$r=-.06$
Axis 5 (Coping level)	$r=+.27^{**}$	$r=+.41^{**}$
Global Assessment Scale	$r=-.40^{**}$	$r=-.77^{**}$
<u>Cultural Affiliation and Function</u>		
Hmong traditionality	$r=+.25^*$	$r=+.12$
Acculturation to U.S.	$r=-.15$	$r=-.24^*$
Orientation: time & place	$r=-.23^*$	$r=-.11$
English literacy (read, write, spell tasks)	$r=-.26^*$	$r=-.34^{**}$
<u>Psychiatric Symptoms, Self-rated</u>		
1.90-item Symptom Checklist (SCL-90)		
Genl. Sx. Index	$r=+.90^{**}$	$r=+.45^{**}$
Somatization	$r=+.68^{**}$	$r=+.40^{**}$
Obsess-Compul.	$r=+.76^{**}$	$r=+.41^{**}$
Interpers. Sensit.	$r=+.81^{**}$	$r=+.42^{**}$
Depression	$r=+.82^{**}$	$r=+.44^{**}$
Anxiety	$r=+.79^{**}$	$r=+.38^{**}$
Hostility	$r=+.65^{**}$	$r=+.27^{**}$
Phobic Anxiety	$r=+.60^{**}$	$r=+.09$
Paranoid Ideation	$r=+.72^{**}$	$r=+.28^{**}$
Psychoticism	$r=+.81^{**}$	$r=+.42^{**}$
2. Zung Depr. Scl.	$r=+.55^{**}$	$r=+.41^{**}$
<u>Psychiatric Scales, Psychiatrist-Rated</u>		
1. Hamilton Anxiety Scale	$r=+.59^{**}$	$r=+.83^{**}$
2. Hamilton Depression Scale	$r=+.57^{**}$	$r=+.89^{**}$
3. Brief Psychiatric Rating Scale	$r=+.47^{**}$	$r=+.80^{**}$
4. Nurse's Observation Scale Inpatient Evaluation		
Depression	$r=+.40^{**}$	$r=+.68^{**}$
Irritability	$r=+.16$	$r=+.40^{**}$
5. Inpatient Multidimensional Psychiatric Scale		
Anxious Intropunitiveness	$r=+.51^{**}$	$r=+.72^{**}$
Hostile Belligerence	$r=+.16$	$r=+.40^{**}$
Projection	$r=+.19$	$r=+.36^{**}$
Total Score	$r=+.44^{**}$	$r=+.75^{**}$

* $P < .05$ ** $P < .01$ (2 tailed correlation coefficient)

TABLE 3
PSYCHIATRIC TREATMENT LAST 5 YEARS IN U.S.
VS. STRESSORS AND PTSS

Stressor- PTSS	Mean (and Standard Deviation)		Statistical Significance
	<u>Psy. Rx</u>	<u>No Psy. Rx</u>	
Number of subjects	13	87	
<u>Stressors</u>			
War stressors	1.0 (0.4)	1.1 (0.4)	t=0.88, P=.38
Flight stressors	2.4 (1.4)	2.1 (1.2)	t=0.81, P=.48
U.S. stressors	2.5 (0.9)	1.7 (1.2)	t=2.58, P<.01
Total, all stressors	5.9 (1.6)	4.9 (1.6)	t=2.18, P<.03
<u>PTSS Scales</u>			
Self-PTSS	1.7 (0.8)	1.2 (0.6)	t=2.39, P<.02
Psychiatrist-PTSS	0.8 (0.6)	0.4 (0.3)	t=2.32, *P<.04

* Separate variance estimate.

TABLE 4
SEVERITY OF VICTIMIZATION AMONG REFUGEE PATIENTS:
DEMOGRAPHIC AND CLINICAL CHARACTERISTICS

<u>Characteristic</u>	<u>Category of Victimization</u>			<u>Statistical</u> <u>Neither Significance</u>
	<u>Deliberate</u>	<u>Random</u>		
Number of subjects	16	63	207	
Demographic Characteristics				
Ethnicity (Southeast Asians only)				
- Hmong	3	48	116	$X^2=19.668$ - Low
landers	13	14	86	$P<.001$
Age				
- mean	44.2 yrs.	35.7 yrs.	32.3 yrs.	F ratio = 5.93
- stan. dev.	14.7	13.5	14.3	$P<.005$
Marital Status (groups combined)				
- single/married	8	50	171	$X^2=11.120$
- div./sep./wid.	8	13	33	$P<.005$ (2 df)
Clinical Characteristics: 5 Axis DSM-III-R Diagnoses				
Axis 1 Diagnosis (x diagnosis vs. non-x diagnosis, both "victim" categories combined for Chi Square testing)				
- PTSD	25%	8%	0.5%	$P<.001$ ($X^2=16.65$)
- Substance Dis.	25%	13%	4%	$P=ns$
- Mood Disorder	75%	76%	72%	$P=ns$
Axis 3 Bio-medical Conditions				
- any condition	63%	48%	57%	$P=ns$
Axis 5 Psychosocial Coping (DSM-III, previous year; 3=average, 4=fair, 5=poor)				
- mean	4.31	4.00	3.43	F ratio=10.98
- stand. dev.	0.95	0.97	1.06	$P<.001$

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